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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,541	12/28/2005	Francesco Pessolano	NL030781	3960

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER
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DUNN, DARRIN D

ART UNIT	PAPER NUMBER
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2109

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/06/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/562,541

Applicant(s)

PESSOLANO ET AL.

Examiner

Darrin Dunn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/28/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This Office Action is responsive to the communication filed on 12/28/2005.
2. Claims 1-10 have been presented for examination.

### ***Priority***

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/562541, received on 12/28/2005, with a foreign priority date of July 3<sup>rd</sup>, 2003, as noted within the Oath.

### ***Information Disclosure Statement***

4. The references included within the information disclosure statement (IDS) submitted on 12/28/2005 have been considered.

### ***Drawings***

5. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the schematic details as described in paragraph [0033] of the specification. Reference characters 21,25, and 35 all refer to an identical, shaded area; however, the shaded area fails to delineate the receiver, detector, and reproduction means. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the

application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims and cannot contain empty boxes. The empty boxes corresponding to figures 1-3 must contain features shown in the claims. Therefore, the claimed features must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

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number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

7. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.

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(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

8. Applicant's specification does not include section titles and/or subtitles pursuant to sections [f-j].

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 5-6 recite the limitation "the step of adapting." There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

11. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claim 7 is rejected under 35 U.S.C. 101 because the claim is directed toward non-statutory subject matter. The claim is directed toward a computer program, and as

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such, it is intended to be a manufacture. Although a computer program is recited, it is unclear if the instructions are necessarily in executable form. Thus, an argument could be made that claim covers an embodiment of non-functional descriptive material. Nevertheless, whether functional or non-functional, claim 7 fails to claim the program recorded on an appropriate computer readable medium so as to be structurally and functionally interrelated to the medium and permit the function of the descriptive material to be realized.

### ***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. Claims 1,3-5, & 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Sylliassen USPN 2002/0135474 A1.

15. As per claim 1, Sylliassen teaches a method of controlling an electronic device ([ABSTRACT], [FIG. 1], [0024]) comprising the steps of:

Detecting (1) a state of a user ([FIG 4A] e.g., detecting motion)

Determining (3) whether, based on this state, the user is asleep ([0059] e.g., if motion falls below a threshold then system infers user is asleep); and

Switching (5) the electronic device to a mode of reduced power consumption when it has been determined that the user is asleep ([0059] e.g., electronic device is shutoff, i.e., reduced power consumption)

16. As per claim 3, Sylliassen teaches a method as claimed in claim 1, characterized in that the step of detecting (1) a state of a user comprises detecting his movement ([0059])

17. As per claim 4, Sylliassen teaches a method as claimed in claim 3, characterized in that the step of determining (3) whether the user is asleep comprises determining (3) whether his movement has been detected for a predetermined period of time ([FIG 4A], [0059])

18. As per claim 5, Sylliassen teaches a method as claimed in claim 1, characterized in that it further comprises the step of adapting (11) output generated by the electronic device on the basis of the state of the user ([0059], [0049] e.g., electronic device may issue warning messages and/or shutdown signals, i.e., varying signals interpreted as adaptations of the generated output of the electronic device. The varying signals are a function of the state of the user, i.e., motion)

19. As per claim 7, Sylliassen teaches a computer program enabling a programmable device to carry out a method as claimed in claim 1 ([0023])

20. As per claim 8, Sylliassen teaches an electronic device (21) ([ABSTRACT], [0024]), comprising:



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A receiver (23) for receiving ([0023], [0045] e.g., data bus coupled to sensors), from a detector (25) ([0026]) a detection signal (inherent to detector) comprising a state of a user ([0045] e.g., motion); and

A control unit (27) which is able to use the receiver (23) to receive the detection signal from the detector (25) determine whether, based on his state, the user is asleep, and switch the electronic device (21) to a mode of reduced power consumption when it has been determined that the user is asleep ([FIG 6], [0045], [0052], [0059] e.g., processor interpreted as a control for receiving input from sensor indicative of the state of user. The processor determines the state of the user and generates a shutdown signal based on the state, i.e. movement, see FIG 4A-B. In turn, the shutdown signal is sent to AND/OR circuit for effectuating the shutdown of the electronic device)

21. As per claim 9, Sylliasen teaches an electronic device (21) ([ABSTRACT], [0024]) as claimed in claim 8, characterized in that it further comprises:

An output means (31) which is able to generate an output signal ([FIG 1], [FIG 4A-B], [FIG 5A-B], [0048] e.g., flow chart depicts generation of an output signal, i.e., shutdown signal.);

The control unit (27) is able to adapt the output signal on the basis of the state of the user ([FIG 1], [FIG 4A-B], [FIG 5A-B], [0048], [0059] e.g., processor functions as the control unit that is operable to output a shutdown signal or a warning message. The flow charts depict the determination of a user state based on motion.)

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22. As per claim 10, Sylliassen teaches an electronic device (21) ([ABSTRACT], [0024]) as claimed in claim 8, characterized in that it further comprises a motion detector ([0023])

***Claim Rejections - 35 USC § 103***

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

25. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sylliassen USPN 2002/0135474 in view of Lidow et al. USPN 4228806.

26. As per claim 2, Sylliassen teaches an electronic device which detects the state of a user ([ABSTRACT]). However, Sylliassen does not teach an electronic device that expressly measures the user's brainwaves to determine the state of the user. Lidow et al. teaches a system for discriminating the sleep state of a body by measuring brain wave activity i.e., brainwaves ([ABSTRACT], [Col. 1, lines 5-9], [Col. 2, lines 12-15]).

At the time the invention was made, one of ordinary skill in the art would have motivation to modify Sylliassen to include an additional sensor as taught by Lidow et al. to monitor the brainwave of a sleeping subject. Sylliassen and Lidow et al. provide a means to control an electronic device (Lidow et al. inhibits the operation of an alarm, i.e., controlling an electronic device). In addition, Lidow et al. expressly provides an additional way to monitor the state of a subject, i.e., detecting brainwaves to verify the sleep state of a subject using a sensor.

Sylliassen is concerned with solving the problem of detecting the state of the user, particularly the sleep state of a user, and Sylliassen expressly discloses motivation to utilize additional sensors to monitor the state of a subject, see [0023]. Lidow et al. provides an additional means to detect the state of a sleeping user to control an electronic device, and one of ordinary skill in the art could readily adapt Sylliassen in view of Lidow et al. to include sensors to monitor the brainwave of a user to determine a corresponding sleep state.

27. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sylliassen USPN 2002/0135474 in view of Wiebking DE 3338649 A.

28. As per claim 6, Sylliassen teaches the control of an electronic device ([0024] e.g., television) in terms of emitting a shutdown signal ([0059]). However, Sylliassen does not teach one of the following: reducing volume of the sound output by the electronic device; reducing quality of sound output by the electronic device; reducing the size of image output; and reducing quality of image output by the electronic device. Wiebking

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teaches a sleep inducing source, which upon the user falling asleep, reduces the sound ([ABSTRACT] e.g., reducing the volume of the electronic device)

At the time the invention was made, one of ordinary skill in the art would have motivation to modify Sylliassen to include lowering the volume of the electronic device. Both Sylliassen and Wiebking pertain to the problem of turning an electronic device off upon detecting a user is asleep. Wiebking includes varying the sound output in order to avoid disturbing the user's sleep, and Sylliassen provides a means to control the electronic device upon detecting a user is asleep. Since lowering the volume of a device consumes less power (lower output voltage corresponds to lower power consumption) in addition to reducing the likelihood of awakening a sleeping person (which in turn could activate full power or the opposite of power conservation), one of ordinary skill in the art could successfully modify the electronic device as taught by Sylliassen to include the ability to lower the volume to save power upon detecting a sleeping state of a user as taught by Wiebking.

### ***Conclusion***

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5101831 - System for discriminating sleep state

5902255 – Human monitoring device

20030052789 – Automatic shut-off light system when user sleeps

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20030080872 – Adaptive alarm system

20060169903 – Sensor unit for controlling electronic appliances

JP04271044 – Sleeping device to monitor state of a user

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darrin Dunn whose telephone number is (571) 270-1645. The examiner can normally be reached on EST:M-R(8:00-5:00) 9/5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571) 272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DD  
02/21/2007

  
XIAO WU  
SUPERVISORY PATENT EXAMINER